

CELLULAR PHYSIOLOGY WORKSTATIONS FOR AUTOMATED DATA  
ACQUISITION AND PERFUSION CONTROL

Abstract of the Disclosure

Cellular physiology workstations for automated data  
5 acquisition and perfusion control are described. The  
cellular physiology workstation may be used for  
physiological and electrophysiological experiments. Methods  
for employing such cellular physiology workstations in  
physiological and electrophysiological experiments are also  
10 disclosed. The cellular physiology workstations comprise  
one or more recording chambers each for holding one or more  
cells to be measured. One or more cells are place in each  
recording chamber. Perfusions means, such as an automatic  
perfusion system is connected to the recording chamber to  
15 perfuse the cells with a plurality of solutions containing  
different concentration of one or more agents to be tested.  
Biosensors, such as patch clamps, electrodes, or microscopes  
are positioned to detect a response from the cell. The  
cellular physiology workstation may optionally comprise  
20 injecting means for introducing an injection solution into  
the cell before and during analysis.